

U.S. Department of the Interior
Bureau of Land Management
White River Field Office
73544 Hwy 64
Meeker, CO 81641

ENVIRONMENTAL ASSESSMENT

NUMBER: CO-110-2005-161-EA

CASEFILE/PROJECT NUMBER (optional): COC-67996

PROJECT NAME: Sprague Gulch Access

LEGAL DESCRIPTION: Sixth Principal Meridian, Colorado
T. 3 S., R. 95 W., Sec. 18, 29;
T. 3 S., R. 96 W., Sec. 24, 25, 36;
T. 4 S., R. 95 W., Sec. 1.

APPLICANT: EnCana Oil & Gas (USA) Inc.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES:

Background/Introduction: Although the right-of-way that precipitated this EA would apply only to the public lands (about 4.5 miles) and the public land easement that the Sprague Gulch Road passes through (two miles), the EA addresses the affected environment and environmental consequences along the entire 16.5 mile route of the access route up the Sprague Gulch Road and west along the Divide Road to its intersection with the Middle Fork Stewart Gulch Road (Figure 2). The decision to include the entire length of the access route in the EA is based on the route's critical potential as access to future Federal actions, for example, drilling on Federal mineral estate under the EnCana holdings along the route (the Girls Claims) or further west in the Federal Double Willow Unit.

Proposed Action: EnCana has submitted an application (November 16, 2004) for right-of-way across public lands and a public land easement on the road up Sprague Gulch from Piceance Creek to a point approximately six miles south of the Piceance Creek Road (Rio Blanco County Road 5) at which point the road enters private property. The right-of-way would be used to access EnCana drilling operations along the Divide Road, in particular a well location on EnCana property in T5S, R96W, Sec. 4 (the B04 596 well location). It would also provide access to other natural gas development within EnCana's newly acquired property, the North Parachute Ranch (formerly the UnoCal property), and to natural gas development operations within the Federal mineral estate in Townships 4 South, Range 95 and 96 West (the Girls Claims).

In addition to crowning and ditching as needed and adding to existing water bars as needed, four site-specific improvements to the road include (Figure 2):

- A hardened low water crossing installed at the crossing of Piceance Creek to expedite the creek crossing;
- Replacement of a culvert at the switchback in NWNWSE of Sec. 25, T3S, R95W with a longer culvert;
- Widening and drainage improvements to the road from the switchback up the grade in the SWNE and the NENW of Sec. 25, T3S, R95W; and
- Rerouting of a section of road, about 2,300 feet in length, in the SWNW of Sec. 25, T3S, R95W.

The requested construction right-of-way at those locations requiring improvement or rerouting would be 50 feet in width; the permanent right-of-way would be 30 feet. Total surface disturbance would be about five acres, of which about two acres would be the long-term disturbance associated with the new section of rerouted road.

No Action Alternative: The proposed access would not be granted and no road improvements would be made.

NEED FOR THE ACTION: Access along this route is critical to EnCana's management of its newly acquired property, the North Parachute Ranch (formerly the UnoCal property), and to its plans for development of the natural gas resources of the North Parachute Ranch. Most immediately, this access route will expedite drilling operations at the B04 596 well location in T5S, R96W, Sec. 4. This location was constructed over the winter using access up Middle Stewart Gulch. While EnCana will continue to use the Middle Stewart route to get to the Divide Road, access up Sprague Gulch will provide a necessary alternate. As additional well locations are developed on the North Parachute Ranch property, drilling and servicing will require additional reliable access. The Sprague Gulch Road is the superior and more reliable access of the two.

Beyond the access needs of the North Parachute Ranch, the Sprague Gulch route also accesses other UnoCal property purchased by EnCana in Township 4 South, Ranges 95 and 96 West. Although these lands are private surface, the mineral estate is held by the Federal government. EnCana has applied for unit status on these Federal leases held in this area. The unit, to be named the Story Gulch Unit, will be accessed primarily up the Sprague Gulch Road. Although not as immediate as the provision of access to the North Parachute Ranch, access to the Story Gulch Unit could become necessary by fall 2005.

PLAN CONFORMANCE REVIEW: The Proposed Action is subject to and has been reviewed for conformance with the following plan (43 CFR 1610.5, BLM 1617.3):

Name of Plan: White River Record of Decision and Approved Resource Management Plan (ROD/RMP).

Date Approved: July 1, 1997

Decision Number/Page: Page 2-49: “To make public lands available for the siting of public and private facilities through the issuance of applicable land use authorizations, in a manner that provides for reasonable protection of other resource values.”

Decision Language: The proposed action has been reviewed for conformance with this plan (43 CFR 1610.5, BLM 1617.3). The action conforms to the decisions/pages of the plan listed above.

AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES / MITIGATION MEASURES:

STANDARDS FOR PUBLIC LAND HEALTH: In January 1997, Colorado Bureau of Land Management (BLM) approved the Standards for Public Land Health. These standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Because a standard exists for these five categories, a finding must be made for each of them in an environmental analysis. These findings are located in specific elements listed below.

CRITICAL ELEMENTS

AIR QUALITY

Affected Environment: The project area is within a Class II Prevention of Significant Deterioration (PSD) air quality area. No Class I PSD areas are within 30 miles of the project area.

The principal air quality parameter likely to be affected by construction activity on the existing road is the inhalable particulate level (PM₁₀ - particles ten microns or less in diameter) associated with fugitive dust. Although no monitoring data are available for the survey area, it can be surmised that the air quality is good because the Colorado Air Pollution Control Division (APCD) estimates the maximum PM₁₀ levels (24-hour average) in rural portions of western Colorado like the Piceance Basin to be less than 50 micrograms per cubic meter. This estimate is well below the National Ambient Air Quality Standard (NAAQS) for PM₁₀ (24-hour average) of 150 µg/m³.

Environmental Consequences of the Proposed Action: The construction activity on the existing road would result in short-term, local impacts on air quality during and after construction, due to dust being blown into the air. Granting the right-of-way would result in an increase in traffic and an increase in average vehicle weights, both of which would promote seasonal increases in fugitive dust levels. Exhaust resulting from increased traffic and construction operations will also contribute to temporary reductions in local air quality.

However, after proper mitigation the proposed action should not greatly compromise National Ambient Air Quality Standards (NAAQS) on a daily or hourly basis.

Environmental Consequences of the No Action Alternative: None

Mitigation: The operator will be responsible for complying with all local, state, and federal air quality regulations as well as providing documentation to the BLM that they have done so. To minimize production of fugitive dust, vehicle speeds must not exceed 15 mph *or* dust plume must not be visible at appropriate designated speeds for road design. The application of a dust suppressant (e.g. water or “Dust Stop”) will be required during dry periods when dust plumes are visible at speeds less than or equal to 15 mph. Surfacing the roadway with gravels will also help mitigate fugitive dust production.

CULTURAL RESOURCES

Affected Environment: The entire route from its beginning at Piceance Creek, up to the Divide Road and along the Divide Road to its intersection with the road up Middle Stewart Gulch (Figure 2) was inventoried recently at the Class III (100% pedestrian) level (Conner and Davenport 2005, Compliance Dated 5/16/2005). Two isolated finds had previously been recorded in the area inventoried (5GF1121 and 5GF3667). No additional significant cultural resources were identified by this inventory and archaeological clearance was recommended.

Environmental Consequences of the Proposed Action: Construction of the proposed pipeline would not impact any known cultural resources.

Environmental Consequences of the No Action Alternative: None

Mitigation: 1. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days, the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places,
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming *in situ* preservation is not necessary),
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

2. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4 (c) and (d), the holder must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the AO.

FLOOD PLAINS, WETLANDS, RIPARIAN ZONES, AND ALLUVIAL VALLEYS (includes a finding on Standard 2)

Affected Environment: No flood plains, wetlands or riparian zones would be encountered along the road with the exception of the crossing on Piceance Creek on private land. The area of the crossing is fenced to provide a watergap for livestock. No riparian vegetation occurs at the existing low water crossing. Some streamside herbaceous plant species, limited to grazing tolerant plants do occur on either side of the crossing.

Environmental Consequences of the Proposed Action: Upgrading the crossing on Piceance Creek is not expected to have any negative impacts on the minimal riparian vegetation near the crossing.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

Finding on the Public Land Health Standard for Riparian Systems: Though the riparian area at the Piceance Creek crossing is on private land, a comparable finding for a public land health standard would be that the riparian system along this section is probably meeting the standard. The actions proposed are not expected to negatively affect existing conditions along the creek.

INVASIVE, NON-NATIVE SPECIES

Affected Environment: An on-site inspection of the Sprague Gulch Road to the Divide Road was made on November 19, 2004 with a follow-up inspection on May 13, 2005. An on-site inspection of the Divide Road to the intersection with the Middle Stewart Gulch Road was made on August 23, 2004. An area of approximately 50 to 100 feet either side of the existing road or of flagged reroute areas was inventoried for noxious weeds. No large infestations of noxious or invasive weed species were observed along the road. Scattered occurrences of cheatgrass, houndstongue, mullein and perennial pepperweed were observed along the road in the bottom of

Sprague Gulch. Scattered occurrences of cheatgrass on disturbed areas alongside the road occur from Sprague Gulch to the Divide Road and along the Divide Road to the Middle Stewart Gulch Road.

Environmental Consequences of the Proposed Action: This general area of the Piceance Basin has infestations of houndstongue, musk thistle, yellow toadflax, leafy spurge, black hensbane and spotted knapweed, all of which are being treated by BLM, local ranchers and others. The disturbance associated with the proposed action could create a noxious weed problem by transporting seed from existing noxious weed occurrences in Sprague Gulch to other areas of the road or by importing weed seed on vehicles and equipment used in upgrading of the road.

The houndstongue and perennial pepperweed observed along the road in Sprague Gulch could be transported to other areas of the road and present an invasion threat to adjacent un-disturbed plant communities. The cheatgrass occurrences along the road do not pose an invasion threat to the adjacent healthy plant communities, but do pose a threat to the success of reclaiming disturbed areas adjacent to the travel surface of the road.

Environmental Consequences of the No Action Alternative: None

Mitigation: The operator will clean all off-road equipment to remove seed and soil prior to commencing operations on public lands within the project area.

The operator will eliminate any noxious plants which become established before any seed production has occurred. Eradication should make use of materials and methods approved in advance by the Authorized Officer.

The operator should be required to monitor disturbed areas for establishment of any noxious weed species. Monitoring should continue until successful reclamation efforts have been achieved.

The operator should be required to attain sufficient vegetation cover from reclamation species within three growing seasons that is comparable to that of nearby undisturbed plant communities.

Other mitigation is included in the Vegetation section.

MIGRATORY BIRDS

Affected Environment: The sagebrush and mountain shrub communities found within the project area support a large array of migratory birds that nest during the months of May, June and July. Bird populations associated with these communities that have a high conservation interest (i.e., Rocky Mountain Bird Observatory, Partners in Flight program) are listed in the following table. There are no specialized or narrowly endemic species known to occupy the project area.

Birds of High Conservation Priority by Habitat Association

Sagebrush	Mountain shrub
Brewer's sparrow Green-tailed towhee	Blue grouse Common poorwill

The access route goes south up Sprague Gulch, then rises up the plateau to the ridge between Story Gulch and East Fork Stewart Gulch, and proceeds to and along the Divide Road for about 16.5 miles. The drainage bottom of Sprague Gulch is basin big sagebrush, the side hills are primarily mountain shrub and the ridge top is a mountain sagebrush community with serviceberry scattered throughout the type. Aspen stands occur in side draws to Sprague Gulch and off the ridge but no aspen stands would be removed during construction. An inventory of the access route on May 26, 2005 observed many green-tailed towhees in the vicinity of the proposed road reroute.

Environmental Consequences of the Proposed Action: Rerouting and improving the road would result in disturbance on about five acres of mountain shrub habitat. The proposed action would represent a longer term but minor incremental reduction in the extent of the habitat associations described. Implementation of the proposed action would have no measurable influence on the abundance or distribution of breeding migratory birds at the scale proposed. Nesting of migratory birds may be disrupted and nests could be lost should construction activities occur during the May through July period.

Environmental Consequences of the No Action Alternative: None

Mitigation: None

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL SPECIES (includes a finding on Standard 4)

Affected Environment: The area of the proposed action includes no federally-listed animal species and no habitat for such species. The special status species of concern in the project area include two Colorado BLM Sensitive Species, northern goshawk and greater sage-grouse. Additionally, other accipiters - sharp-shinned hawk and Cooper's hawk - are species of concern that may be found along the access road.

Within the Piceance Creek drainage, habitats with the greatest potential for goshawk are Douglas-fir and aspen stands. Several such stands occur in side draws to Sprague Gulch and off the ridge. These are generally small pockets of smaller trees of marginal value for goshawk nesting, but they may be particularly attractive to other accipiters (Cooper's and sharp-shinned hawk) and red-tailed hawks for nesting. Raptor surveys along the Sprague Gulch corridor were conducted on April 13 and 24, 2005. A total of eight areas of suitable habitat were intensively searched. Three of these included active or potentially active raptor nests. The active nests were checked again on May 26, 2005.

Nest 1 is in Sprague Gulch in a Douglas-fir grove located in a side draw to the west of the road in the NENE of section 24. A large stick nest visible from the road is located in one of the trees.

A great horned owl (GHO) was observed on the nest during the first two visits. On the first visit (April 13, 2005) at least two eggs were observed in the nest from the hillside above. It was thought to likely be an old red-tail or possibly golden eagle nest that has been taken over by a GHO. On May 26, an adult GHO was observed again at the nest in lower Sprague Gulch. It was observed from the road and no approach to the nest was made.

A search of mature pinyon/juniper on the hillside above the road on BLM land in section 25 first detected the remnants of a stick nest on April 13, 2005 (Nest 2). On the return trip on April 24, the nest appeared much improved with a well defined bowl, but no eggs. No raptors were detected during any of these visits to this site. It was thought to be a sharp-shinned hawk nest with its status for this year still undetermined. A follow-up visit on May 26 found an adult accipiter on the nest, either incubating eggs or brooding young. She appeared to be incubating eggs because she never moved, even though the observers were 12-15 feet and almost eye-level with the nest at one time. Only the underside of the tail and a red eye and beak were visible and, although definitely an accipiter nest, the species could not be determined.

Nest 3 was a Cooper's hawk nest located in an aspen stand on private land. An adult female Cooper's hawk was present and remained in the area for three to four minutes, frequently vocalizing. The nest is located in an aspen tree 20 feet off the ground. The nest is within 400 feet of a newly up-graded section of road, but down in a draw and over the horizon from the road. A follow-up visit on May 26 revealed fresh whitewash under the nest but it was not determined if an adult is incubating or brooding young birds. An adult Cooper's hawk was seen flying on the edge of the aspen stand. Since the bird was not defending this particular nest, there may be another nest in what looks to be about a 50-acre stand of aspen.

In summary, three raptor nests were located, two of which are definitely active this year and one of unknown status. A total of 75 acres was surveyed during two inventories and one follow-up visit. The UTM Zone 12S, NAD 83 coordinates for the nest locations are:

Nest 1	Nest 2	Nest 3
Great Horned Owl	Suspected Sharp-shinned Hawk	Cooper's Hawk
0747749mE	0747055 mE	0747139 mE
4407467mN	4405215 mN	4397078 mN

The southern two-thirds of the access route is located in suitable sage-grouse habitat. A number of historic leks are closely associated with the proposed access route, including the Litchliter lek in the SW1/4 section 12 (T4S R96W), several at the head of East Fork of Middle Fork Stewart Gulch, as well as the Barnes Ridge leks. All big sagebrush and mixed shrub habitats situated along these ridgelines and basins retain potential as nest and brood habitat. The reproductive function of these features and habitats would likely be reestablished, restored, or used with increased frequency as local sage-grouse populations respond to applied management. However, current Colorado Division of Wildlife (CDOW) information indicates that no active leks are located within two miles of the route. This information should be confirmed as results of a series of aerial flights to locate grouse leks becomes available in early June. No grouse were observed on any of the three visits to the proposed access route.

Environmental Consequences of the Proposed Action: Construction of the re-route and the road improvements would not remove any suitable nesting trees, including the three identified in the inventory. However, the construction has the potential to disturb nesting activity in the nests adjacent to the route. Sharp-shinned hawks fledge up to August 18 and Cooper's hawk as late as September 1 (Kingery, 1998) so construction within ¼ mile of the nests during the summer months could disrupt the nesting activity. If no construction or road improvements were to be done in those areas until after September 1, or until the birds have left the nest, the risk of disruption would be removed.

No suitable sage-grouse habitat would be removed by proposed road improvements and no leks are located within two miles of the proposed route so no impacts on sage-grouse habitat or sage-grouse would occur.

Environmental Consequences of the No Action Alternative: None.

Mitigation: The access route is adjacent to three trees that support nesting raptors. In order to avoid the possible disturbance of raptor nest sites, no construction or road improvements should take place within ¼ mile of those trees until the nesting/fledging period is over (September 1, or when birds have left the nest if this occurs prior to September 1).

Finding on the Public Land Health Standard for Threatened & Endangered species: The standard with regard to the goshawk is being met and would continue to be met. The majority of the project is within the overall range for sage-grouse but no suitable habitat would be removed by construction of any road improvements. Throughout the Eureka/Double Willow project area and other nearby areas being developed by the proponent, the standard with regard to the greater sage-grouse is expected to be satisfied by mitigation for grouse or grouse habitat to be developed by BLM and the Colorado Division of Wildlife. Greater sage-grouse mitigation developed for these units will be in addition to mitigation developed for other oil and gas development areas within the Piceance Basin.

THREATENED, ENDANGERED, AND SENSITIVE PLANT SPECIES (includes a partial finding on Standard 4)

Affected Environment: An on-site inspection of the Sprague Gulch road was made on November 19, 2004 with a follow-up inspection on May 13, 2005. An on-site inspection of the Divide Road to the intersection with the Middle Stewart Road was made on August 23, 2004. An area of approximately 100 feet either side of the existing roads or either side the flagged reroute was inventoried for special status species (SSS) of plants or their suitable habitat. No SSS plants or their suitable habitat were found within the area inventoried.

Environmental Consequences of the Proposed Action: No impact to any special status species of plants would occur from upgrading or rerouting of the road.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

Finding on the Public Land Health Standard for Threatened & Endangered species:
The standard with regard to the special status species of plants is being met and would continue to be met. The project is not in or near suitable habitats for any special status plants.

WASTES, HAZARDOUS OR SOLID

Affected Environment: There are no known hazardous or other solid wastes on the subject lands. No hazardous materials are known to have been used, stored or disposed of at sites included in the project area.

Environmental Consequences of the Proposed Action: No listed or extremely hazardous materials in excess of threshold quantities are proposed for use in this project. While commercial preparations of fuels and lubricants proposed for use may contain some hazardous constituents, they would be stored, used and transported in a manner consistent with applicable laws, and the generation of hazardous wastes would not be anticipated. Solid wastes would be properly disposed of.

Environmental Consequences of the No Action Alternative: No hazardous or other solid wastes would be generated under the no action alternative.

Mitigation: The operator shall be required to collect and properly dispose of any solid wastes generated by the proposed actions.

WATER QUALITY, SURFACE AND GROUND (includes a finding on Standard 5)

Affected Environment: Surface Water: The proposed action will affect the following catchment areas: Piceance Creek, Stewart Gulch, West Fork Stewart Gulch, Harrison Gulch, Sprague Gulch, Davis Gulch, West Fork Parachute Creek, and Middle Fork Parachute Creek.

BLM road #1005 begins at the confluence of Sprague Gulch and Piceance Creek. A low-water crossing exists at the location BLM #1005 crosses Piceance Creek. Approximately the first three miles of BLM #1005 runs directly up Sprague Gulch, while the remaining portion (~ 9.25 miles) runs along the headwaters of drainage divides in the Piceance Creek catchment area. BLM #1005 terminates at its junction with BLM #1000 which also happens to be the drainage divide between the White River and the Colorado River Basins.

A gaging station was operated by USGS on Piceance Creek approximately 5 miles downstream of the proposed ROW. Data from that station (based on 25 years of record) indicate a seasonal variation of flow. High flows generally occurred in May, and base flow conditions occurred September through February. Sediment data collected at that station ranged from 6 milligrams per liter (mg/l) to 20,300 mg/l. During base flow conditions the sediment levels were generally below 150 mg/l. Concentrations during high flow were generally in the 5,000 to 7,500 mg/l range. No flow or water quality data are available for Sprague Gulch but given the ephemeral

state and size of the drainage, concentrations of suspended sediment are anticipated to be far less than those recorded downstream in Piceance Creek.

The main stem of Piceance Creek can be found in stream segment 15 of the White River Basin. Harrison Gulch, Sprague Gulch, and Davis Gulch are situated in stream segment 16 while Stewart Gulch and its tributaries have been placed in stream segment 17 of the White River Basin. Both the West Fork Parachute and Middle Fork Parachute Creeks are located in stream segment 4a of the Lower Colorado River Basin.

A review of the Colorado's 1989 Nonpoint Source Assessment Report (plus updates), the 305(b) report, the 303(d) list and the Unified Watershed Assessment was done to see if any water quality concerns have been identified. Stream segment 4a of the Colorado River Basin has been identified on the states 303d list of impaired watersheds. Segment 4a is selenium impaired and allowable selenium concentrations have been modified to existing ambient levels. The State has classified stream segment 16 and 17 of the White River Basin as "Use Protected". The antidegradation review requirements in the Antidegradation Rule are not applicable to waters designated use-protected. For those waters, only the protection specified in each reach will apply.

Stream segment 16 has been designated by the state as beneficial for the following uses: Warm Aquatic Life 2, Recreation 2, and Agriculture. Minimum standards for four parameters have been listed, these parameters are: dissolved oxygen = 5.0 mg/l, pH = 6.5 - 9.0, Fecal Coliform = 2000/100 ml, and 630/100 ml E. coli. Stream segment 16 retained its Recreation Class 2 designation after sufficient evidence was received that a Recreation Class 1a use was unattainable.

Stream segment 17 has been designated by the state as beneficial for the following uses: Cold Aquatic Live 2, Recreation 2, and Agriculture. Minimum standards for four parameters have been listed, these parameters are: dissolved oxygen = 6.0 mg/l, pH = 6.5 – 9.0, Fecal Coliform = 2000/100 ml, and 630/100 ml E. coli. Stream segment 17 retained its Recreation Class 2 designation after sufficient evidence was received that a Recreation Class 1a use was unattainable.

Stream segment 15 of the White River Basin and segment 4a of the Lower Colorado River Basin have not been designated "Use Protected". Thus, the Antidegradation Rule is applicable to these waters.

Ground Water: A majority of the access road is located in areas of local ground water recharge or near stream banks.

Environmental Consequences of the Proposed Action: Increased truck traffic will cause rutting to develop over portions of the roadway. Rut development will channelize surface water down the roadway accelerating erosion rates. Heavy truck traffic on the road way will also increase soil compaction resulting in erosive overland flows.

Water quality issues may also arise if leaks or spills involving environmentally unfriendly substances are allowed to penetrate local water tables or contact surface waters. Contaminants

having potential to be in direct contact with surface water would be detrimental to water quality as well as the health of riparian communities and wildlife in the downstream reaches.

Stream segment 4a of the Colorado River Basin will be vulnerable to increased selenium levels due to elevated erosion rates. However, increased selenium concentrations are not anticipated given the location of the proposed action in the Parachute Creek watershed (along the drainage divide), and the extent of surface disturbance associated with upgrading the existing access road.

CSU-1 “fragile” soils will be prone to sliding when saturated. In the absence of functional drainage structures, sediment loads will be elevated to down stream reaches adversely impacting stream hydrology and channel morphology.

The proposed ROW should have little effect on ground water. In the event of a leak or spill of contaminants during transport, local ground water could be at risk.

Environmental Consequences of the No Action Alternative: None.

Mitigation: Construction activities such as the proposed road re-route require a stormwater discharge permit from the Colorado Department of Public Health and Environment, Water Quality Control Division. As a condition of the permit, a Stormwater Management Plan (SWMP) would be developed showing how Best Management Practices (BMPs) are to be used to control runoff and sediment transport. The applicant is required to have a copy of the SWMP available for review by the Meeker Field Office and to implement the BMPs in that plan as on-site conditions warrant.

The operator will be responsible for complying with all local, state, and federal water quality regulations as well as provide documentation to the BLM that they have done so.

Nearly 100% of BLM road # 1005 must be upgraded in attempts to minimize rutting and stabilize fill slopes introducing sediment to the stream. All upgrades must strictly adhere to “Gold Book” surface operating standards for oil and gas exploration and development. CMPs will NOT be used as drainage relief structures on slopes greater than 10%. Based on the nature of the affected soils, drain dips will be utilized in place of CMPs in these locations. Any upgrades or damage to the existing ROW will be upgraded or repaired at the expense of the operator.

A temporary improved low water crossing with a “hardened” creek bottom will be used in place of a vented ford at the Piceance Creek crossing. This temporary crossing will allow access to no more than 20 total pad locations and its design must be approved by the BLM prior to construction.

Due to the potential cumulative impacts resulting from future development on the North Parachute Ranch property (more than 20 well pads), construction of a prefabricated bridge (designed to withstand a 50 year flood event) with concrete abutments (nearly identical to the structure built over Piceance Creek on BLM # 1002) will be required for future development when the 20 well pad threshold for the low water crossing is reached. The use of a bridge will mitigate potential contamination to surface waters due to leaks or spills as well as mitigate severe

deterioration of the stream bank/channel at the Piceance Creek crossing. Bridge construction will take place only during low flow periods in attempts to minimize suspended sediment loads in stream segment 15.

To mitigate water being channelized down the roadway due to rut development, all activity must stop when soils or road surfaces become saturated to a depth of three inches. If rutting becomes an issue, the operator can haul in additional material to harden the road surface. Mud blading will be prohibited in attempts to reduce further soil displacement.

Special care will be given to stabilizing cut and fill slopes adjacent stream channels in attempts to minimize sediment loads. Portions of the roadway contacting fragile soils or showing signs of accelerated erosion will be fitted with the appropriate stabilization measures (e.g. silt fences, jute netting, and drain dips). The use of rip-rap adjacent to stream channels for bank stabilization purposes will be used sparingly to allow natural channel/bank development. Ground cover (e.g. woody debris) will be immediately applied to fill slopes and unseeded exposed surfaces. In addition, all disturbed surfaces will be promptly revegetated with the Native Seed mix #2 to provide long term stabilization.

Finding on the Public Land Health Standard for water quality: Water quality in the affected stream segments currently meets water quality standards set by the state. By following proper mitigation measures outlined above, water quality will not be changed from present conditions.

CRITICAL ELEMENTS NOT PRESENT OR NOT AFFECTED:

No prime and unique farmlands, wild and scenic rivers, Areas of Critical Environmental Concern or Wilderness exist within the project area. No Native American religious or environmental justice concerns are associated with the proposed action.

NON-CRITICAL ELEMENTS

The following elements **must** be addressed due to the involvement of Standards for Public Land Health:

SOILS (includes a finding on Standard 1)

Affected Environment: The following data is a product of an order III soil survey conducted by the NRCS in Rio Blanco and Garfield Counties. The accompanying table highlights important soil characteristics. A complete summary of this information can be found at the White River Field Office.

CSU-1 “fragile” soils will be encountered along a significant portion of the proposed work area (~ 1.83 miles) in Rio Blanco County. Controlled surface use stipulations will apply to all these sections of the ROW.

Rio Blanco County Soils:

Soil Number	Soil Name	Slope	Ecological site	Salinity (mmhos/cm)	Run Off	Erosion Potential	Bedrock
15	Castner channery loam	5-50%	Pinyon-Juniper woodlands	<2	Medium to rapid	Moderate to very high	10-20
36	Glendive fine sandy loam	2-4%	Foothills Swale	2-4	Slow	Slight	>60
42	Irigul channery loam	5-50%	Loamy Slopes	<2	Medium to rapid	Very high	10-20
43	Irigul-Parachute complex	12-45% 5-30%	Loamy Slopes/Mountain Loam	<2	Rapid	Slight to high	10-20
58	Parachute Loam	25-75%	Brushy Loam	<2	Medium	Very high	20-40
70	Redcreek-Rentsac complex	5-30%	PJ woodlands/PJ woodlands	<2	Very high	Moderate to high	10-20
73	Rentsac channery loam	5-50%	Pinyon-Juniper woodlands	<2	Rapid	Moderate to very high	10-20
76	Rhone loam	30-75%	Brushy Loam	<2	Medium	Very high	40-60
91	Torriorthents-Rock Outcrop complex	15-90%	Stoney Foothills		Rapid	Very high	10-20
96	Veatch channery loam	12-50%	Loamy Slopes	<2	Medium	Moderate to very high	20-40

Garfield County Soils:

Soil Number	Soil Name	Slope	Ecological site	Salinity (mmhos/cm)	Run Off	Erosion Potential	Bedrock
48	Northwater loam	15-65%		<2	Slow	Slight	50
50	Olney loam	3-6%	Rolling Loam	<2	Slow	Moderate	60
52	Parachute loam	25-65%	Brushy Loam	<2	Medium	Moderate	29
53	Parachute-Rhone loams	5-30%	Mountain Loam	<2	Medium	Moderate	29
55	Potts loam	3-6%	Rolling Loam	<2	Slow	Moderate	60
56	Potts loam	6-12%	Rolling Loam	<2	Medium	Severe	60
61	Rhone loam	30-70%	Brushy Loam	<2	Slow	Slight	52
63	Silas loam	3-12%	Mountain Swale	<2	Slow	Slight	60

Environmental Consequences of the Proposed Action: Since the Sprague Gulch Road is already in place the majority of new soil disturbance would occur at the four sites where road

improvements or rerouting are proposed. At all of those sites, vegetative surface cover would be removed and the soil disturbed, thus potentially increasing soil erosion and reducing soil health and productivity. The table below shows the soil units found at each site and the area of new disturbance at each site. Reclamation of the existing road at the site of the reroute is counted as a new disturbance and adds almost an acre to the total.

Area of New Disturbance by Soil Mapping Unit (acres)				
Site	Rio Blanco County Soil Mapping Unit			Total Area
	15	36	73	
Low water Crossing		0.07		0.07
Switchback			0.14	0.14
Grade			0.41	0.41
Reroute	0.63		2.53	3.16
Road Reclamation	0.19		0.77	0.96
Total	0.83	0.07	3.86	4.75

The disturbances associated with the grade improvement and the road reroute make up most of the new disturbance and are also located on steeper slopes with *Moderate to Very High* erosion potential. The location of the disturbances on steeper slopes would increase the importance of proper application of mitigation measures described in the Stormwater Management Plan and the standard COAs.

Increased truck traffic will cause rutting to develop over portions of the roadway. Rut development will channelize surface water down the roadway accelerating erosion rates. Heavy truck traffic on the road way will also increase soil compaction resulting in erosive overland flows.

Rio Blanco County soil # 36 is highly calcareous and covers nearly the whole ROW in the Sprague Gulch catchment area. If drainage relief structures are not properly maintained along these sections, piping and mass wasting will occur do to the dissolution of calcium carbonate.

Environmental Consequences of the No Action Alternative: No right-of-way would be issued and heavy truck traffic would not be permitted. New surface disturbance and Rut development would be less extensive and erosion rates would be subdued. Piping and mass wasting will occur (to a lesser extent) without proper maintenance/mitigation.

Mitigation: Segregation of topsoil material and replacement of top soil in its respective original position (last out, first in) would assist in the reestablishment of soil health and productivity.

An onsite evaluation reviled that nearly 100% of BLM road # 1005 must be upgraded in attempts to minimize rutting and stabilize cut and fill slopes adjacent to stream channels. All road construction must strictly adhere to “Gold Book” surface operating standards for oil and gas exploration and development. At locations fragile soils are encountered along the access way, an engineered construction/reclamation plan must be submitted and approved by the Area Manager before any construction will be permitted. Native Seed mix #2 will be used in combination with

silt fences and geo-textile fabric on fill slopes to enhance stabilization. Any upgrades or damage to the existing right-of-way will be upgraded or repaired at the expense of the operator.

Finding on the Public Land Health Standard for upland soils: Soils within the project area meet the criteria established in the standard for upland soils. Following proper mitigation, soil health will not be adversely impacted by the proposed actions.

VEGETATION (includes a finding on Standard 3)

Affected Environment: Three principal plant communities would be impacted by rerouting and upgrading of the existing road:

- a basin big sagebrush community with a grass/forb understory on alluvial deposited soils in the drainage bottom of Sprague Gulch.
- a mountain shrub community on the slopes and lower ridge tops of Sprague Gulch. This community has scattered pinyon and juniper mixed on the drier exposures of the slopes and scattered pinyon on the lower ridge top.
- A mountain sagebrush community with serviceberry scattered throughout. The amount of serviceberry mixed with the sage increases with elevation along the route.

Environmental Consequences of the Proposed Action: Anticipated impacts to vegetation would include removal from areas of the road which are widened or rerouted. The road reroute would remove about three acres of vegetation. Other improvements would remove another acre of vegetation. After successful reclamation of temporary disturbances and of the 1,400 feet of rerouted roadway, the net addition to long-term loss of vegetation along the route would be about two acres. The travel surface of the road is not expected to impact adjacent vegetation. However, the areas of disturbance next to the travel surface could provide suitable conditions for noxious and invasive plant species to become established.

Environmental Consequences of the No Action Alternative: None

Mitigation: All areas disturbed (side slopes, etc.) during upgrading, with the exception of the road travel surface, would be reclaimed within the first growing season or prior to the first full growing season following disturbance, using the following seed mix:

Native Seed Mix #2

Species	Seeding Rate (Pure Live Seed)*
Western wheatgrass (Rosanna)	2.0 lbs/ac
Indian ricegrass (Rimrock)	2.0 lbs/ac
Bluebunch wheatgrass (Whitmar)	1.0 lbs/ac
Thickspike wheatgrass (Critana)	2.0 lbs/ac
Needle and thread	1.0 lbs/ac
Globemallow or Utah sweetvetch	0.5 lbs/ac

* Seeding rate for drill seeding. Double the rate for broadcast/harrow seeding
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Successful re-vegetation should be achieved within three years. The operator will be required to monitor the project site for a minimum of three years after construction to detect the presence of noxious/invasive species. Any such species which occur will be eradicated using materials and methods approved in advance by the Authorized Officer.

The section of road replaced by the reroute would be recontoured and revegetated and made impassable to vehicular travel by installing a series of “tank traps” at both the upper and lower ends of the reclaimed road segment.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Wildlife, Aquatic and Wildlife, Terrestrial): The plant communities within the area of the proposed action have an appropriate structure and diversity of species which meet the criteria established in the standard for vegetation. The proposed action is not expected to change this status.

WILDLIFE, AQUATIC (includes a finding on Standard 3)

Affected Environment: The Sprague Gulch Road crosses Piceance Creek and the proposed action calls for installation of a low water crossing at the crossing. Piceance Creek does not have a self-sustaining trout fishery (Elmblad, 2005) but a field visit on May 26, 2005 observed three trout averaging about eight inches in length on the upstream side of the ford. These fish are probably escapees from the ponds above Sprague Gulch.

Environmental Consequences of the Proposed Action: Proper installation of a hardened low water crossing in Piceance Creek at the location of the existing low-water crossing should have no negative impact on the current status of the Creek as a fishery or on any aquatic species.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Aquatic): The standard for plant and animal communities with respect to aquatic wildlife is being met and will continue to be met with proper installation of the crossing.

WILDLIFE, TERRESTRIAL (includes a finding on Standard 3)

Affected Environment: After rising out of Sprague Gulch about 3.5 miles from Piceance Creek, the access road proceeds seven miles on a north-to-south ascending ridge to the Divide Road, on which it proceeds west for about six more miles. Paralleling the ridge that the road follows to the Divide Road are East Fork Stewart Gulch on the west and Story Gulch on the east. The habitat in the drainage bottom of Sprague Gulch is basin big sagebrush, the side hills are

primarily mountain shrub and the ridge top is mountain sagebrush habitat with serviceberry scattered throughout the type. Aspen and Douglas-fir stands occur in side draws to Sprague Gulch and off the ridge top.

The entire length of the road passes through habitat that is utilized by deer and elk during various periods of the year. The ridge serves as a corridor for seasonal movements. All but the last mile of the route from Piceance Creek south is considered normal elk winter range and much of that is within a winter concentration area. Only the lower 2.5 miles is considered normal deer winter habitat; no severe winter range is located in or near the area the access road passes through.

Environmental Consequences of the Proposed Action: Road construction and improvement would result in the temporary removal of up to five acres of forage for mule deer and elk. Three acres of the forage loss would be short-term, until re-vegetation is successfully completed. Increases in disturbance to wildlife on a ¼ mile corridor along the access road would impact approximately 2,500 acres. Since the road is already in place, the impact won't be disturbance of new areas, but more frequent disturbance of areas already subject to vehicle use. That increase would be felt most during the winter months when the road would be kept open all winter, something that has not occurred to date.

Environmental Consequences of the No Action Alternative: No habitat loss or increased disturbance to deer and elk and other wildlife would occur at this time and this place.

Mitigation: The permit holder would be responsible for reestablishing approximate original contours on that portion of existing road bypassed by the proposed reroute, and for conditioning this reclaimed section such that further vehicle traffic, including ATVs, is effectively precluded. The right-of-way holder will be responsible for selecting and applying vehicle deterrents, and would remain responsible for ensuring that deterrents remain effective at preventing vehicle use of this reclaimed section through the life of the permit.

Finding on the Public Land Health Standard for plant and animal communities (partial, see also Vegetation and Wildlife, Terrestrial): This project would not jeopardize the viability of any animal population. It would have no significant consequence on terrestrial habitat condition, utility, or function, nor have any discernible effect on animal abundance or distribution at any landscape scale. The public land health standard would thus be met.

OTHER NON-CRITICAL ELEMENTS: For the following elements, only those checked in the last column will be addressed further in this EA.

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Access and Transportation			X
Cadastral Survey	X		
Fire Management		X	

Non-Critical Element	NA or Not Present	Applicable or Present, No Impact	Applicable & Present and Brought Forward for Analysis
Forest Management		X	
Geology and Minerals		X	
Hydrology/Water Rights		X	
Law Enforcement		X	
Noise		X	
Paleontology			X
Rangeland Management			X
Realty Authorizations			X
Recreation			X
Socio-Economics			X
Visual Resources			X
Wild Horses	X		

ACCESS AND TRANSPORTATION

Affected Environment: The Sprague Gulch Road is a public access road that leads to over 10,000 acres of public lands in Townships 3 and 4 South, Ranges 96 and 95 West. The route crosses private land on a BLM easement and proceeds south out of Sprague Gulch up to the north-south trending ridge top. After about 6.5 miles, the public access route leaves public land and continues south on a term-limited easement over private land, terminating at a locked gate in Section 33, Township 4 South, Range 96 West. The road is physically in fair condition, with a low water crossing at Piceance Creek and some steep and narrow pitches as it comes out of the gulch. Traffic is low most of the year, peaking during hunting season.

The public lands accessed by the road are within an area where motorized vehicle traffic is limited to existing roads from October 1 to April 30 each year. Cross-country motorized vehicle travel is allowed from May 1 to September 30 as long as no resource damage occurs as a result. Leaving the public access route where it crosses private land is not permitted by the private landowners.

Environmental Consequences of the Proposed Action: The improvements to the existing road and the reroute would make travel up the road easier but would not affect existing motorized vehicle use patterns in the area since the road is for the most part already in fairly good condition. Traffic up the road would certainly increase since that is the purpose of the proposed action. Well drilling equipment, pipeline construction equipment and gas production traffic would travel along the road throughout the day. Year-round maintenance would open the road up to winter travel. Most of the winter traffic would be associated with natural gas development activity south of Piceance Creek.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

PALEONTOLOGY

Affected Environment: The proposed road re-route and road improvements are located in an area mapped as the Uinta Formation (Tweto, 1979). BLM has classified the Uinta as a Condition I formation, meaning that it is a known producer of scientifically significant fossils.

Environmental Consequences of the Proposed Action: Since the actions proposed in the project area would occur within the Uinta formation, there is potential for impacting fossil resources if it is necessary to excavate into the underlying bedrock formation to improve the road.

Environmental Consequences of the No Action Alternative: None

Mitigation: 1. All exposed rock outcrops in the project area shall be examined by an approved paleontologist with a report detailing the results of the inventory and any mitigation recommendation shall be submitted to the BLM prior to the initiation of any construction.

2. A monitor shall be present at any time that it becomes necessary to excavate into the underlying bedrock formation in order to construct any project features.

3. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing paleontological sites, or for collecting fossils. If fossil materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear to be of noteworthy scientific interest
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not feasible)

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

RANGELAND MANAGEMENT

Affected Environment: The Sprague Gulch Road crosses both private land and public land that are in the Dan Johnson's use area of the Piceance Mountain Allotment. The area which the road crosses is grazed by cattle from May to October.

Environmental Consequences of the Proposed Action: A minimal forage loss for livestock is expected from this action. If reclamation efforts of disturbed areas adjacent to the road's travel surface are successful, a small increase in forage available to livestock could occur.

Increased disturbance to livestock could occur from increased use of the road. However, the road is public and the extent of any disturbance is not known.

Environmental Consequences of the No Action Alternative: None

Mitigation: None.

REALTY AUTHORIZATIONS

Affected Environment: The proposed pipeline crosses 3.9 miles of public land administered by BLM and 2.0 miles of a BLM easement across private land.

Environmental Consequences of the Proposed Action: A right-of-way (ROW) grant from BLM would be required. The proposed road use and improvements have been serialized as COC-67996.

Environmental Consequences of the No Action Alternative: None.

Mitigation: The road improvements must be constructed to BLM Standards and as specified in the "Gold Book" for Surface Operating Standards for Oil and Gas Exploration and Development (Third Edition 1997).

No improvements can be made to the road surface or width after Piceance Creek is crossed and through the private property unless the private landowner approves the proposed changes. A copy of any such agreement will be supplied to the BLM.

RECREATION

Affected Environment: The proposed action occurs within the White River Extensive Recreation Management Area (ERMA). BLM custodially manages the ERMA to provide for unstructured recreation activities such as hunting, dispersed camping, hiking, horseback riding, wildlife viewing and off-highway vehicle use.

The area traversed by the road most closely resembles a Recreation Opportunity Spectrum (ROS) class of Semi-Primitive Motorized (SPM). A natural appearing environment with few administrative controls typically characterizes an SPM recreation setting; there is low interaction between users but evidence of other users may be present. An SPM recreation experience is

characterized by a high probability of isolation from the sights and sounds of humans that offers an environment with challenge and risk.

The Sprague Gulch Road is one of a limited number of routes with legal public access into public lands south of Piceance Creek. However, recreation use of the area is relatively low, increasing dramatically during hunting season. Hunting is the primary recreating activity in the area.

Environmental Consequences of the Proposed Action: Because the Sprague Gulch Road is a public road, the public that make use of the road would benefit from the installation of the hardened low water crossing in Piceance Creek, the road reroute, the other road improvements and the regular maintenance. However, the public could be negatively impacted by delays during the construction activity and by the increased level of traffic brought about by oil and gas industry use of the road. It is likely that the increase in oil and gas industry traffic will change the area adjacent to the road from Semi-Primitive Motorized to Roaded Natural ROS. Cumulatively, with the introduction of new well pads and roads, an increase of traffic could be expected increasing the likelihood of human interactions, the sights and sounds associated with the human environment and a less naturally appearing environment.

Environmental Consequences of the No Action Alternative: None.

Mitigation: Construction activities on the road should be managed so that the flow of traffic will generally not be impeded, except for short delays to move equipment on and off the roadway.

SOCIOECONOMICS

Affected Environment: The proposed action would take place in Rio Blanco and Garfield Counties. Construction resources could be drawn from Garfield County and Mesa County as well as Rio Blanco County. Rio Blanco County had a 2002 population of 6,063, almost unchanged from the 1990 level of 6,051. The major communities in the county are Meeker (2,272 population in 2002) and Rangely (2,108). The county underwent a substantial economic and demographic growth in the late 1970's and early 1980's as major energy companies attempted to develop oil shale as a national energy fuel source. After a decline in jobs and population from the boom levels, the number of jobs and people in the county has remained static. Currently, the government sector makes up almost a third of all jobs in the county. The traditional farming and ranching sector has been supplemented in the last few years by a growing number of jobs in the oil and gas extraction industry as drilling activity has expanded. Many of the resources for development of the oil and gas resource come out of Garfield County or Mesa County and locate in Rio Blanco County on only a temporary basis.

Other than natural gas exploration and development, livestock grazing and commercial outfitting are the only other economic activities that currently take place within the project area.

Environmental Consequences of the Proposed Action: The employment required for construction of the road re-route and other improvements would most likely not be new employment but workers already available in the area. Some may very well reside in other western Colorado counties. Local motels, restaurants, grocery stores, gas stations, vehicle and equipment repair shops may experience some additional activity. The net effect would be considered beneficial but low.

Environmental Consequences of the No Action Alternative: None.

Mitigation: None.

VISUAL RESOURCES

Affected Environment: About ¼ of the Sprague Gulch Road (4.5 of 16.5 miles) is located on public lands administered by BLM that have received a VRM Class III designation. Under this designation, the management goal for this class is to partially retain the existing character of the landscape. The change brought about by activities on lands with VRM III designation may be evident. The visual contrast may be moderate but should not dominate the natural landscape character. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Visual sensitivity of the area is low because there is limited public use of the area. Additionally, distance and intervening terrain shield the area from the most highly traveled route in the area, the Piceance Creek Road (CR 5). Local ranchers, some recreationists, and a growing number of oil and gas company employees and contractors make up most of the potential viewing public.

Environmental Consequences of the Proposed Action: The proposed road construction and improvements would alter the landscape character very little. Removal of vegetation at the site of the 2,300 foot road reroute would be the most notable change. This would introduce a linear feature into the landscape and offer contrasting soil and vegetation colors and patterns that had not previously been there. The location of the disturbance on the hillside would magnify the effect in the foreground. This change would lessen in the long-term as exposed areas were reclaimed and bare soil was not so extensively evident.

Viewed from the middle-background, the changes in the overall landscape of the project area would appear to be minimal and would not dominate the natural character of the landscape. The character of the landscape would be retained, meeting the standards of the VRM III classification.

Environmental Consequences of the No Action Alternative: None

Mitigation: None.

CUMULATIVE IMPACTS SUMMARY: Cumulative impacts from oil and gas development were analyzed in the White River Resource Area PRMP/FEIS. Current development, including the action proposed in the analyzed action, has not exceeded the foreseeable development analyzed in the PRMP/FEIS.

REFERENCES CITED

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Conner, Carl E. and Barbara J. Davenport. 2005. Class III Cultural Resource Inventory Report for the Sprague Gulch Access Road (16.5-miles) in Garfield and Rio Blanco Counties for EnCana Oil and Gas (USA) Inc. Grand River Institute. Grand Junction, Colorado.

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USDI Bureau of Land Management, Colorado. 1997. White River Record of Decision and Approved Resource Management Plan (ROD/RMP). Meeker, Colorado.

PERSONS / AGENCIES CONSULTED: None

INTERDISCIPLINARY REVIEW:

Project Team		
Name	Title	Area of Responsibility
BLM Oversight		
Penny Brown	Realty Specialist	Project Lead; Realty Authorizations
Keith Whitaker	Natural Resource Specialist	Visual Resources
Ed Hollowed	Wildlife Biologist	Migratory Birds; Threatened, Endangered and Sensitive Animal Species; Wildlife; Wetlands and Riparian Zones
Tamara Meagley	Natural Resource Specialist	Areas of Critical Environmental Concern; Threatened and Endangered Plant Species
Chris Ham	Outdoor Recreation Planner	Recreation; Wilderness; Access and Transportation
Mark Hafkenschiel	Rangeland Management Specialist	Vegetation; Invasive, Non-Native Species; Rangeland Management
Michael Selle	Archeologist	Cultural and Paleontological Resources
Nate Dieterich	Hydrologist	Air Quality; Water Quality, Hydrology and Water Rights; and Soils
Paul Daggett	Mining Engineer	Geology and Minerals
Ken Holsinger	Natural Resource Specialist	Fire Management
Robert Fowler	Forester	Forest Management
WestWater Engineering (Third Party Contractor)		
Dan McWilliams	Senior Engineer	Air Quality; Water Quality, Surface and Ground; Hydrology and Water Rights; Geology and Minerals; Soils
Steve Moore	Environmental Scientist	Areas of Critical Environmental Concern; Cultural Resources; Paleontological Resources; Wastes, Hazardous or Solid; Access and Transportation; Wilderness; Realty Authorizations; Recreation; and Visual Resources
Rusty Roberts	Range Conservationist	Threatened and Endangered Plant Species; Invasive, Non-Native Species; Wetlands and Riparian Zones; Vegetation; Fire Management; Rangeland Management; and Wild Horses
Doug McVean/John Gray	Wildlife Biologists	Migratory Birds; Threatened, Endangered and Sensitive Animal Species; Wildlife, Terrestrial and Aquatic
Mike Klish	Environmental Scientist	Forest Management

Finding of No Significant Impact/Decision Record (FONSI/DR)

CO-110-2005-161-EA

FINDING OF NO SIGNIFICANT IMPACT (FONSI)/RATIONALE: The environmental assessment, analyzing the environmental effects of a proposed right-of-way on the Sprague Gulch Road, has been reviewed. The approved mitigation measures (attached to the right-of-way grant as stipulations) for the proposed action – Right-of-Way COC-67996 - result in a finding of no significant impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the above proposed action.

WestWater Engineering, an environmental consulting firm, with the guidance, participation, and independent evaluation of the Bureau of Land Management (BLM) prepared this document. The BLM, in accordance with 40 CFR 1506.5 (a) and (c), is in agreement with the findings of the analysis and approves and takes responsibility for the scope and content of this document

DECISION/RATIONALE: It is my decision to approve proposed right-of-way on the Sprague Gulch Road. The proposed action is in concert with the objectives of the White River ROD/RMP in that it would make public lands available for the siting of private facilities through the issuance of applicable land use authorizations, in a manner that provides for reasonable protection of other resource values. The protection for other resource values will be assured by implementation of the mitigation measures described below and attached to the right-of-way grant as stipulations.

MITIGATION MEASURES: 1. The operator will be responsible for complying with all local, state, and federal air quality regulations as well as providing documentation to the BLM that they have done so. To minimize production of fugitive dust, vehicle speeds must not exceed 15 mph *or* dust plume must not be visible at appropriate designated speeds for road design. The application of a dust suppressant (e.g. water or “Dust Stop”) will be required during dry periods when dust plumes are visible at speeds less than or equal to 15 mph. Surfacing the roadway with gravels will also help mitigate fugitive dust production. Topsoil stockpiled for short periods of time (e.g. roads construction) will be wetted to reduce dust production. All disturbed areas will be promptly revegetated.

2. The operator is responsible for informing all persons who are associated with the project operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during any project or construction activities, the operator is to immediately stop activities in the immediate area of the find that might further disturb such materials, and immediately contact the Authorized Officer (AO). Within five working days, the AO will inform the operator as to:
 - whether the materials appear eligible for the National Register of Historic Places,

- the mitigation measures the operator will likely have to undertake before the site can be used (assuming *in situ* preservation is not necessary),
- a timeframe for the AO to complete an expedited review under 36 CFR 800-11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation cost. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

3. Pursuant to 43 CFR 10.4(g) the holder of this authorization must notify the AO, by telephone, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4 (c) and (d), the holder must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the AO.
4. The operator will clean all off-road equipment to remove seed and soil prior to commencing operations on public lands within the project area.
5. The operator will eliminate any noxious plants which become established before any seed production has occurred. Eradication should make use of materials and methods approved in advance by the AO.
6. The operator is required to monitor disturbed areas for establishment of any noxious weed species. Monitoring should continue until successful reclamation efforts have been achieved.
7. The operator is required to attain sufficient vegetative cover from reclamation species within three growing seasons that is comparable to that of nearby undisturbed plant communities.
8. The access route is adjacent to three trees that support nesting raptors. In order to avoid the possible disturbance of raptor nest sites, no construction or road improvements should take place within ¼ mile of those trees until the nesting/fledging period is over (September 1, or when birds have left the nest if this occurs prior to September 1).
9. The operator is required to collect and properly dispose of any solid wastes generated by the proposed actions.
10. Construction activities such as the proposed road re-route require a stormwater discharge permit from the Colorado Department of Public Health and Environment, Water Quality Control Division. As a condition of the permit, a Stormwater Management Plan (SWMP) would be developed showing how Best Management Practices (BMPs) are to be used to control runoff and sediment transport. The applicant is required to have a copy of the SWMP

available for review by the Meeker Field Office and to implement the BMPs in that plan as on-site conditions warrant.

11. The operator will be responsible for complying with all local, state, and federal water quality regulations as well as provide documentation to the BLM that they have done so.
12. Nearly 100% of BLM road # 1005 must be upgraded in attempts to minimize rutting and stabilize fill slopes introducing sediment to the stream. All upgrades must strictly adhere to “Gold Book” surface operating standards for oil and gas exploration and development. CMPs will NOT be used as drainage relief structures on slopes less than 10%. Based on the nature of the affected soils, drain dips will be utilized in place of CMPs in these locations. Any upgrades or damage to the existing ROW will be upgraded or repaired at the expense of the operator.
13. A temporary improved low water crossing with a “hardened” creek bottom will be used in place of a vented ford at the Piceance Creek crossing. This temporary crossing will allow access to no more than 20 total pad locations and its design must be approved by the BLM prior to construction.
14. Due to the potential cumulative impacts resulting from future development on the North Parachute Ranch property (more than 20 well pads), construction of a prefabricated bridge (designed to withstand a 50 year flood event) with concrete abutments (nearly identical to the structure built over Piceance Creek on BLM # 1002) will be required for future development when the 20 well pad threshold for the low water crossing is reached. The use of a bridge will mitigate potential contamination to surface waters due to leaks or spills as well as mitigate severe deterioration of the stream bank/channel at the Piceance Creek crossing. Bridge construction will take place only during low flow periods in attempts to minimize suspended sediment loads in stream segment 15.
15. Heavy truck traffic must be eliminated during wet periods to reduce deterioration of the roadways and prevent rut development. Seasonal closures to heavy truck traffic must be implemented and enforced.
16. Special care will be given to stabilizing cut and fill slopes adjacent stream channels in attempts to minimize sediment loads. Portions of the roadway contacting fragile soils or showing signs of accelerated erosion will be fitted with the appropriate stabilization measures (e.g. silt fences, jute netting, and drain dips). The use of rip-rap adjacent to stream channels for bank stabilization purposes will be used sparingly to allow natural channel/bank development. Fill slopes will be promptly revegetated with the Native Seed mix #2 to provided long term stabilization.
17. Segregation of topsoil material and replacement of top soil in its respective original position (last out, first in) would assist in the reestablishment of soil health and productivity.
18. At locations where fragile soils are encountered along the access way, an engineered construction/reclamation plan must be submitted and approved by the Area Manager before

any construction will be permitted. Native Seed mix #2 will be used in combination with silt fences and geo-textile fabric on fill slopes to enhance stabilization. Any upgrades or damage to the existing right-of-way will be upgraded or repaired at the expense of the operator.

19. All areas disturbed (side slopes, etc.) during upgrading, with the exception of the road travel surface, would be reclaimed within the first growing season or prior to the first full growing season following disturbance, using the following seed mix:

Native Seed Mix #2

Species	Seeding Rate (Pure Live Seed)*
Western wheatgrass (Rosanna)	2.0 lbs/ac
Indian ricegrass (Rimrock)	2.0 lbs/ac
Bluebunch wheatgrass (Whitmar)	1.0 lbs/ac
Thickspike wheatgrass (Critana)	2.0 lbs/ac
Needle and thread	1.0 lbs/ac
Globemallow or Utah sweetvetch	0.5 lbs/ac
* Seeding rate for drill seeding. Double the rate for broadcast/harrow seeding	

19. Successful re-vegetation should be achieved within three years. The operator will be required to monitor the project site for a minimum of three years after construction to detect the presence of noxious/invasive species. Any such species which occur will be eradicated using materials and methods approved in advance by the Authorized Officer.
20. All exposed rock outcrops in the project area shall be examined by an approved paleontologist with a report detailing the results of the inventory and any mitigation recommendation shall be submitted to the BLM prior to the initiation of any construction. A monitor shall be present at any time that it becomes necessary to excavate into the underlying bedrock formation in order to construct any project features.
21. Should fossil resources be discovered at any time during construction, all construction activity in the vicinity of the discovery shall cease until the BLM and an approved paleontologist have time to evaluate the discovery and recover the remains. Work shall not resume in the area of the find without written approval of the AO.
22. Construction activities on the road should be managed so that the flow of traffic will generally not be impeded, except for short delays to move equipment on and off the roadway.
23. The road improvements must be constructed to BLM Standards and as specified in the "Gold Book" for Surface Operating Standards for Oil and Gas Exploration and Development (Third Edition 1997).
24. No improvements can be made to the road surface or width after Piceance Creek is crossed and through the private property unless the private landowner approves the proposed changes. A copy of any such agreement will be supplied to the BLM.

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SIGNATURE OF AUTHORIZED OFFICIAL: *James R. Hall*
Field Manager

DATE SIGNED: *7/26/05*

ATTACHMENTS: Figure 1 Location map of the proposed action
Figure 2

BLM White River Resource Area

Location of Project Area Sprague Gulch Access Road



